

Viśvakarmā Sūkta

-Arun Kumar Upadhyay, Bhubaneswar, (M) 9437034172

arunupadhyay30@yahoo.in

(Summary)

There are many literal translations having many errors due to ignorance of technical terms. In this translation of Viśvakarmā Sūkta (R̥gveda, 10/81, 82) with 7+7 verses, meaning of 13 levels of Viśva, 3 x 3 dhāma, devas, 14 Bhuvanas, 9 stages of creation, Viśvakarmā, Vāchaspati, tree (vṛkṣa) etc have been explained. This sūkta basically explains the creation in space whose replica is creation on earth. Buildings house the men as lokas are housed in bhuvanas. Mandiras are symbols of creation in space whose image is creation on earth and man itself. Thus, proper translation and definition will help in understanding philosophy of temples.

1. Original text of 2 sūktas- This is given below in Sanskrit without accent marks-

ऋग्वेद, मण्डल १०, सूक्त ८१-ऋषि-विश्वकर्मा भौवनः, देवता विश्वकर्मा। छन्द-त्रिष्टुप्, २-विराड् रूपा
R̥gveda, maṇḍala 10, sūkta 81, Ṛṣi-Viśvakarmā Bhauvana, Devatā-Viśvakarmā. Chanda-
Triṣṭup, for verse 2-Virāḍ rūpā

य इमा विश्वाभुवनानि जुह्वदृषिर्होता न्यसीदत् पिता नः।

स आशिषा द्रविणमिच्छमानः प्रथमच्छदवरौ आविवेश॥ १॥

Ya imā viśvā bhuvanāni dhārayan juhvad ṛṣirhotā nyasīdat pitā nah |

Sa Āśiṣā draviṇamicchhamānah prathamacchhadavarām āviveśa ||

किं स्वदासीदधिष्ठानमारम्भणं कतमत् स्वित् कथासीत्।

यतो भूमिं जनयन् विश्वकर्मा वि द्यामौर्गोन्महिना विश्वचक्षाः॥ २॥

Kim svidāsīnadhiṣṭhānamārambhaṇam katamat svit kathāsīt |

yato bhūmim janayan Viśvakarmā vi dyāmaurṇon mahinā viśvachakṣāḥ ||

विश्वतश्चक्षुरुत विश्वतोमुखो विश्वतोबाहुरुत विश्वतस्पात्।

सं बाहुभ्यां धमति सं पतत्रैर्द्यावाभूमी जनयन् देव एकः॥ ३॥

Viśvataśchakṣuruta Viśvatomukho Viśvatobāhuruta Viśvataspat |

Sam bāhubhyām dhamati sam patatraindyāvāūmī janayan deva ekah ||

किं स्वद्वनं क उ स वृक्ष आस यतो द्यावापृथिवी निष्टतक्षुः।

मनीषिणो मनसा पृच्छतेदु तद् यदध्यतिष्ठद् भुवनानि धारयन्॥ ४॥

Kim svidvanam ka u sa āsa yato dyāvāpṛthivī niṣṭatakṣuh |

maṇiṣiṇo manasā pṛcchhatedu tad yadadhyatiṣṭhad buvanāni dhārayan ||

या ते धामानि परमाणि यावमा या मध्यमा विश्वकर्मन्नुतेमा।

शिक्षा सखिभ्यो हविषि स्वधावः स्वयं यजस्व तन्वं वृधानः॥ ५॥

Yā te dhāmāni paramāṇi yāvamā yā madhyamā Viśvakarmannutmā |

śikṣā sakhibhyo haviṣi svadhāvah svayam yajasva tanvam vṛdhānah ||

विश्वकर्मन् हविषा वावृधानः स्वयं यजस्व पृथिवीमुतद्याम्।

मुह्यन्त्वन्ये अभितो जनास इहास्माकं मघवा सूरिरस्तु॥ ६॥

Viśvakarman haviṣā vāvṛdhānah svayam yajasva pṛthivīmutadyām ।

Muhyantvanye abhito janāsa ihāsmākam maghavā sūrirastu ॥

वाचस्पतिं विश्वकर्माणमूतये मनोजुवं वाजे अद्या हुवेम।

स नो विश्वानि हवनानि जोषद् विश्वशम्भूरवसे साधुकर्मा॥७॥

Vāchaspatim Viśvakarmāṇamūtaye manojuvam vāje adyā huvema ।

sa no viśvāni havanāni joṣad viśvaśambhūravase sādrukarmā ॥

ऋग्वेद, मण्डल १०, सूक्त ८२-ऋषि-विश्वकर्मा भौवनः, देवता विश्वकर्मा। छन्द-त्रिष्टुप्।

R̥gveda, maṇḍala 10, sūkta 81, Ṛṣi-Viśvakarmā Bhauvana, Devatā-Viśvakarmā. Chanda-
Triṣṭup.

चक्षुषः पिता मनसा हि धीरो घृतमेने अजनन्नमने।

यदेदन्ता अददृहन्त पूर्व आदिद्द्यावापृथिवी अप्रथेताम्॥१॥

Chakṣuṣah pitā manasā hi dhīro gṛhamene ajanannamnamāne ।

Yadedantā adadṛhanta pūrva ādi dyāvā pṛthivī aprathetām ॥

विश्वकर्मा विमना आद्विहाया धाता विधाता परमोत संदृक्।

तेषामिष्टानि समिषा मदन्ति यन्ना सप्तऋषीन् पर एकमाहुः॥२॥

Viśvakarmā vimanā ādviḥyā dhātā vidhātā paramota sandṛk ।

teṣāmiṣṭāni samīṣā madanti yannā sapta ṛṣīn para ekamāhuh ॥

यो नः पिता जनिता यो विधाता धामानि वेद भुवनानि विश्वा।

यो देवानां नामधा एक एव तं संप्रश्रं भुवना यन्त्यन्या॥३॥

Yo nah pitā janitā yo vidhātā dhāmāni veda bhuvanāni viśvā ।

Yo devānām nāmadhā eka eva tam sampraśnam bhuvanā yantyanā ॥

त आजयन्त द्रविणं समस्मा ऋषयः पूर्वे जरितारो न भूना।

असूर्ते सूर्ते रजसि निषत्ते ये भूतानि समकृण्वन्निमानि॥४॥

Ta ājayanta draviṇam samasmā ṛṣayah pūrve jaritāro na bhūnā ।

Asūrte sūrte rajasi niṣatte ye bhūtāni samakṛṇvannimāni ॥

परो दिवा पर एना पृथिव्या परो देवेभिरसुरैर्यदस्ति।

कं स्विद् गर्भं प्रथमं दध्न आपो यत्र देवाः समपश्यन्त विश्वे॥५॥

Paro devā para enā pṛthivyā paro devebhiraśurairyadasti ।

Kam svid garbham prathamam dadhra āpo yatra devāḥ samapaśyanta viśve ॥

तमिद्गर्भं प्रथमं दध्न आपो यत्र देवाः समगच्छन्त विश्वे।

अजस्य नाभावध्येकमर्पितं यस्मिन् विश्वानि भुवनानि तस्थुः॥६॥

Tamidgarbham prathamam dadhra āpo yatra devāḥ samagacchhanta viśve ।

Ajasya nābhāvadhyekamarpitam yasmin viśvāni bhuvanāni tasthuh ॥

न तं विदाथ य इमा जजानाऽन्यद्युष्माकमन्तरं बभूवा नीहारेण प्रावृता जल्प्या चाऽसुतृप
उक्थशासश्चरन्ति॥७॥

Na tam vidātha ya imā jajānā' nyadyuṣmākamantaram babhūva ।

nīhāreṇa prāvṛtā jalpyā chā'sutrpa ukthaśāśāścharanti ॥

2. Translation-Ṛṣi of both the sūktas is Viśvakarmā (Bhauvana) i.e. it is human (of this Bhuvana or world) Viśvakarmā. Devatā is Viśvakarmā, i.e. creative or constructive aspect of Brahma (God).

Verse 1

The Creator as conscious cause is father of the Universe. (Material cause is mother, Mātr = matter). For creation of world, He sacrifices Himself, so He is Hotā (offerer). As primordial source, He is Ṛṣi (Asat Prāṇa = minutest beyond perception, primordial string of 10^{-35} m size). With his blessing for growth of created levels, He being the First, entered the later creations-lower in sequence.

Comments-(a) There are 2 abstract levels of creation-(i) Original source is called Rasa = uniform homogenous, isotropic, without any difference at any point. (ii) Next level is separation of matter and energy, but still without any form. Next 5 levels are perceived, called Maṇḍala (spheres)-(i) Svayambhū (self created)-Its visible part is collection of 10^{11} galaxies. (ii) Parameṣṭhī (largest brick), or Brahmāṇḍa (1 egg-shaped unit of the whole Brahma or Universe). Central rotating disc is Ākāśagangā. Its base and creator is Kūrma (who does the work), it is Goloka as zone of rays (nutrino). (iii) Saura = Solar system, (iv) Chāndra = Sphere of moon orbit, (v) Bhū = Earth.

सो अकामयत्। बहु स्यां प्रजायेय इति। ...तत् सृष्ट्वा तदेव अनुप्राविशत्। (तैत्तिरीय उपनिषद् २/६/३)
= He desired, let me create variety of Prajā (beings). After creating these, He entered them.
(This is called Kadavul in Tamil)

असद्वा इदमग्र आसीत्। ततो वै सदजायत। तदात्मानं स्वयमकुरुत। तस्मात्तत् सुकृतम् उच्यत इति। यद्वै तत् सुकृतं रसो वै सः। (तैत्तिरीय उपनिषद् २/७/१-२) = In beginning, it was Asat (beyond perception). From that, sat (tangible) was created. He created from himself. That is called Sukṛta (=good work) as creator, created, source and base- all are one. Root source was called Rasa.

असद् वा इदमग्र आसीत्। तद् आहुः किं तद् असद् आसीद्। ऋषयो वाव तदग्रे आसीत्। तद् आहुः-के ते ऋषयः। प्राणा वा ऋषयः। ते सर्वस्मादिदमिच्छन्तः श्रमेण तपसा अरिषन्तस्तस्माद् ऋषयः। (शतपथ ब्राह्मण, ६/१/१/१)

The Asat in beginning was called Ṛṣi, which were prāṇas (energy or force). They pulled with śrama (work) and tapa (resulting heat), so they were called ṛṣi (rassi in Hindi = string)

पूषन्नेकर्षे यम सूर्य प्राजापत्य व्यूहश्मीन् समूहः (ईशावास्योपनिषद्)

= Original creator was single Ṛṣi (Ekarṣi) called Pūṣā. That created through groups of Rays (Raśmi) by pairs of Sūrya (source, sun) and Yama (end, sink).)

ब्रह्म वै स्वयम्भू तपोऽतप्यत। तदैक्षत-न वै तास्यानन्त्यमस्ति। हन्त-अहं भूतेष्व्वात्मानं जुहुवानि, भूतानि चात्मनि-इति। तत् सर्वेषु भूतेषु आत्मानं हुत्वा, भूतानि चात्मनि, सर्वेषां भूतानां श्रेष्ठ्यं स्वाराज्यं आधिपत्यं पर्यैत्। परमो वा एष यज्ञ क्रतूनां, यत् सर्वमेधः (सर्वहुतः) (शतपथ ब्राह्मण १२/३/१/२)

= Brahma was creator of self (Svayambhū). He did Tapa (hard work) dissipating into heat, but saw no end to it. Then He merged Himself into beings and beings into Himself. By that, He became top among all beings. This Yajña (production) was highest among all Kratu (creations), as the whole was offered for creation (Sarvamedha or Sarvahuta).

(b) The corresponding levels in human body are (i) Sahasrāra at crown of head, like 1000 or infinite possibilities of creation. (ii) Ājñā, behind eyebrow center, with joint pair of Śiva-Śakti like matter/energy in space). (iii) Viśuddhi in throat region-all centres below this are in central vertebral nerve. (iv) Anāhata in heart region, (v) Maṇipūra behind navel, (vi) Svādhiṣṭhāna at base of vertebra, (vii) Mūlādhāra-between passages of stool/urine. Details may be seen in diagram of reverse tree of world.

There are geographical divisions also parallel to this, but are not discussed here.

(c) The 5 maṇḍalas except Chāndra are successively bigger by 10^7 times starting from man. Each sphere is Dyū = sky (limit of world) for the previous sphere, called Bhūmi or Pṛthivī. Thus, there are 3 Bhūmis and for each, its sky is bigger in same ratio as man is to earth planet.

रविचन्द्रमसोर्यावन्मयूखैरवभास्यते ।स समुद्र सरिच्छैला पृथिवी तावती स्मृता ।३।
यावत्प्रमाणा पृथिवी विस्तार परिमण्डलात् । नभस्तावत्प्रमाणं वै व्यास मण्डलतो द्विज ।४।
(विष्णु पुराण, २/७/३,४)

The zone lighted by sun and moon is *Pṛthivī* (earth) and in all the earths-ocean, rivers and mountains are stated as on planet earth (verse 3)-

(i) Planet earth-It is lighted by sun and moon both and it has all-ocean, rivers and mountains.
(ii) *Maitreya-maṇḍala*-It is the zone exclusively lighted by sun. Zones formed by planetary orbits are described as continents and oceans of same name as on earth.
(iii) Galaxy-This is the last limit up to which sun can be seen as a point- Definition of *Brahmāṇḍa* in *Sūrya-siddhānta* (12/90). In this earth also, central rotating disc is called a river-*Ākāśa-gaṅgā*.

(verse 4) Whatever is the size of earth by diameter and circumference, the same is diameter and circumference of its sky, starting from earth-Stated by *Maitreya* to *Parāśara*, addressed as *Dvija* (*Brāhmaṇa*). Planet earth-Its measure should start from human size, which is implied but not stated. (i) Earth is limit (*Koṭi*) of world for man and its size is 10^7 times, so *Koṭi* = 10^7 . For earth also, its *Koṭi* of world is solar system which is its sky and is 10^7 times bigger.

(ii) For *Maitreya-maṇḍala*, its sky or *Koṭi* is galaxy and is 10^7 times bigger.

(iii) For the largest earth galaxy, its sky is universe. This is infinite, but is taken in same ratio of *Koṭi* = 10^7 .Thus the 5 levels of *Viśva* starting with man are successively 10^7 times bigger.

$10^7 = 2^{24}$ and 24 is number of letters in *Gāyatrī chhanda*, so it is said that is measure of all the *Lokas*.

$\times 10^7 = 2^{24}$ $\times 10^7 = 2^{24}$ $\times 10^7 = 2^{24}$ $\times 10^7 = 2^{24}$

Man \longrightarrow Earth \longrightarrow Solar system \longrightarrow Galaxy \longrightarrow Universe

इयमेव (पृथिवी) गायत्री-जैमिनीय उपनिषद् ब्राह्मण, १/५५/३, शतपथ ब्राह्मण, १/४/१/३४, ताण्ड्य महा ब्राह्मण, ७/३/११) गायत्र्या वै देवा इमान् लोकान् व्याप्नुवन् (ताण्ड्य महा ब्राह्मण, १६/१४/४)

Man is world no. 6-Average of length-width-height =1.28 Meters = 10^7 parts of earth diameter.

(d) Lower Worlds are 7, successively smaller than man by 10^5 .

1	2	3	4	5	6	7
<i>Kalila</i>	<i>Jīva</i>	<i>Kuṇḍalinī</i>	<i>Jagat</i>	<i>Deva-dānava</i>	<i>Pitara</i>	<i>R̥ṣi</i>
(Cell)	(Atom)	(Nucleus)	(Moving particles)	(Quarks ?)	(Proto-type)	(Strings)

Size 10^{-5} Meter 10^{-10} Meter 10^{-15} Meter 10^{-20} Meter 10^{-25} Meter 10^{-30} Meter 10^{-35} Meter

Total worlds are 13, so *Viśva* means 13. *Viśva* is any system which is closed, complete and independent.

Refs- (1) कलिल-सर्व धातुं कलनीकृतः, अव्यक्त विग्रहः (तस्मात् कलिल) चरक संहिता, शरीरस्थान (४/९)

In womb, cell starts collecting all materials, so it is called *kalila*.

वालाग्र मात्रं हृदयस्य मध्ये विश्वं देवं जातरूपं वरेण्यं (अथर्वशिर उपनिषद् ५)

अनाद्यनन्तं कलिलस्य मध्ये विश्वस्य स्रष्टारमनेकरूपम् ।

विश्वस्यैकं परिवेष्टितारं ज्ञात्वा देवं मुच्यते सर्व पाशैः ॥ (श्वेताश्वतर उपनिषद्, ५/१३)

A cell also is a *Viśva*, which is enclosed (*pariveṣṭita*).

(2) वालाग्र शत साहस्रं तस्य भागस्य भागिनः । तस्य भागस्य भागार्धं तत्क्षये तु निरञ्जनम् ॥ (ध्यानविन्दु उपनिषद्, ४)

Starting from man, hair-end is first smaller *Viśva* 100 thousand times smaller. There are 6 more levels smaller by same ratio. Smallest is *Nirañjana* (not perceived by any instrument, or mind)

(3) ऋषिभ्यः पितरो जाताः पितृभ्यो देव दानवाः । देवेभ्यश्च जगत्सर्वं चरं स्थाण्वनुपूर्वशः ॥ (मनुस्मृति, ३/२०१)

From *R̥ṣis*, *pitars* were born; then *Deva-dānava*. All *jagat* was from *Deva* only. *Devas* are 33, *Asuras* are 99, so created universe is one-fourth only (*Puruṣa-sūkta* 3,4). *Jagat*= moving particles are of 3 types-*Chara*=lepton, *Sthāṇu*=Baryon, *Anu-pūrva*=Mesonic link particles.

(4) वालाग्र शत भागस्य शतधा कल्पितस्य च ॥

भागो जीवः स विज्ञेयः स चानन्त्याय कल्पते ॥ (श्वेताश्वतर उपनिषद्, ५/९)

Assume 100 parts of 100^{th} part of hair end (micron size)= 10^{-10} Meter. That is *Jīva*, not destroyed in any chemical change-all *Kalpa*=or creation is recombination of atoms only.

(5) षट्चक्र निरूपण, ७-एतस्या मध्यदेशे विलसति परमाऽपूर्वा निर्वाण शक्तिः कोट्यादित्य प्रकाशां त्रिभुवन-जननी कोटिभागैकरूपा । केशाग्रातिगुह्या निरवधि विलसत .. ।९। अत्रास्ते शिशु-सूर्यकला चन्द्रस्य षोडशी शुद्धा नीरज सूक्ष्म-तन्तु शतधा भागैक रूपा परा ।७।

Central nerve is 10^7 parts of hair-end. *Kuṇḍalinī* is still 100 times smaller, equal to nucleus of atom = 10^{-15} meters

(6) असद्वा ऽइदमग्र ऽआसीत् । तदाहः – किं तदासीदिति । ऋषयो वाव तेऽग्रेऽसदासीत् । तदाहुः-के ते ऋषय इति। ते यत्पुराऽऽस्मात् सर्वस्मादिदमिच्छन्तः श्रमेण तपसारिषन्-तस्मादृषयः (शतपथ ब्राह्मण, ६/१/१/१)

In beginning, it was *Asat* (invisible, beyond perception) only. That was *R̥ṣi*. They pulled with force and energy, so they were called *R̥ṣi* = *Rassi* in Hindi (String).

(e) Bhuvanas are 14 compared to 13 viśvas. While Viśva is a system within boundary, Jagat is its invisible function, formed of Jīvas (living beings).

जीवभूतां महाबाहो ययेदं धार्यते जगत्। (गीता ७/५)

त्रिभिर्गुणमयैर्भावैरेभिः सर्वमिदं जगत्। (गीता ७/१३)

मया ततमिदं सर्वं जगदव्यक्तमूर्तिना। (गीता ९/४)

14 Bhuvanas or Bhūta-sarga (creation of living beings) are divide into 3 groups as per Sāṅkhya-

चतुर्दशविधो भूतसर्गः। (तत्त्वसमास १८)

अष्टविकल्पो देवस्तैर्यग्योनश्च पञ्चधा भवति। मानुष्यश्चैकविधः समासतो भौतिक सर्गः॥५३॥

ऊर्ध्वं सत्त्वविशालस्तमोविशालश्च मूलसर्गः। मध्ये रजोविशालो ब्रह्मादिस्तम्ब पर्यन्तः॥५४॥ (सांख्यकारिका)

सांख्य सूत्र ३/४६-दैवादि प्रभेदाः। ४७--आब्रह्मस्तम्बपर्यन्तं तत्कृते सृष्टिराविवेकात्। ४८-ऊर्ध्वं सत्त्वविशाला।

४९-तमोविशाला मूलतः। ५०-मध्ये रजोविशालाः।

Up- Sattva viśāla (expanse of Sattva = source energy)- 8 types

Middle-Rajo viśāla-expanse of Rajo guṇa which is active, creative-man (1 type)

Low-Tamo viśāla-expanse of Tama=inert)-Tiryak yonis (oblique beings, indifferent growth, impaired senses)-5 types

8 sattva viśālas can be seen as average prāṇa level of each of 7 lokas, and Brahma which is common to all. These are-Brahma (or Brahmā), Prajāpati, Indra, Pitṛ-yoni, Gandharva, Rākṣasa, Piśācha. Yoga-darśana gives sequence of their ascent to finer elements- Gandharva, Pitṛya, Daiva, Aindra, Prājāpatya, Brāhma, Videha, Prākṛta-laya (slightly different names).

Tiryak yonis are-Paśu (animals), Mṛga (moving on land), Pakṣī (birds), Sarīṣpa (sliding motion in and on soil), Sthāvara (static- trees and inert soil).

First verse of Atharva veda indicates three 7's of world which is 786 (Bismillah) in sequence of creation-ये त्रिषप्ताः परियन्ति विश्वा रूपाणि बिभ्रतः। वाचस्पतिर्बला तेषां तन्वो अद्य दधातु मे॥

= The 3 sevens surround the world which create and hold forms. They are held by Vāchaspati which may also protect us.

7 lokas-Satya (Infinite universe), Tapa (Visible universe), Janah (Galaxy), Mahar (sphere of width of spiral arm of galaxy containing sun), Svar (solar system), Bhuvar (planetary system) of which lunar orbit region is a part), Bhū (earth).

8 beings of space-sattva-viśāla of 8 types

6 beings on earth-man as image of universe (number of cells in brain is equal to number of galaxies in universe or number of stars in galaxy), dead matter (mṛta or mṛdā = soil), plants (semi-conscious, feel but do not express), beings of earth, water and air.

Verse 2

What was the foundation (of the 5 spheres), what was its form and source matter? How it was created? Viśvakarmā (creator of world) was its knower or seer (Viśvachakṣā). By triple of base-matter-implement, He created Bhūmi (3 fold) and created its limit as Dyu.

Comments-(1) In space, 3 major Bhūmis are-earth planet, solar field of gravitation, galaxy. Limit of their effects (Mahimā) is their Dyu (sky). 3 skies are Solar dyu (limit till which its light is more than galaxy), Galaxy and whole universe.

(2) In general, each object within boundary is Bhūmi, its unity or interlink is Ātmā and its mahimā (field, sāma) is dyu. These are also called Pada (feet, base), Ātmā, Punah-padam.

(3) Spheres	Creator name	Dyau or Dyu
Svayambhū	Viśvakarmā	Parama-ākāśa
Parameṣṭhī	Prajāpati	Mahā-samudra
Saura	Hiraṇyagarbha	Samvatsara
Chāndra	Bhūtātmā	Nakṣatra
Bhū	Sarva-Bhūta-antarātmā	Ānda

Verse 3

The single Creator is all pervading-each point of universe is his Chakṣu (eye, axis = observer or centre of creation), each point can be called Mukha (source), each link or action is Bāhu (hands), and each object within boundary is its feet (Pāda = feet, motion, end product).

Comments- There are many similar verses-

सर्वतः पाणिपादं तत् सर्वतोऽक्षिशिरोमुखम्। सर्वतः श्रुतिमल्लोके सर्वमावृत्य तिष्ठति॥ (श्वेताश्वतर उपनिषद् ३/१६)

Puruṣa (Brahma, creator) has hands, feet, eyes, heads, mouths, ears everywhere and pervades whole world.

ऊर्ध्वमूलमधः शाखमश्वत्थं प्राहुरव्ययम्। छन्दांसि यस्य पर्णानि यस्तं वेद स वेदवित्॥ (गीता १५/१)

Here source is called up and chain of objects are branches down wards. Each object within boundary (Chhanda) is transient like leaves while the chain of creation is like eternal tree.

सहस्रशीर्षा पुरुषः सहस्राक्षः सहस्रपात्। स भूमिं विश्वतो वृत्वात्यत्तिष्ठद्दशांगुलम्॥ (पुरुष सूक्त, यजुर्वेद ३१/१)

Puruṣa (Brahma, creator) is with thousand (infinite) śīrṣa (source, head or mouth), akṣa (axis, eyes) and pāda (end product, base).

Verse 4

Which was that great forest, or which was that great tree from whose cutting, sky and earth were created ? The thinkers may ask the question in their mind as to who has created and

who is holding the world like a tree ?

Comments-The answer is given in Taittirīya samhitā-

ब्रह्मवनं ब्रह्म स वृक्ष आसीत् यतो द्यावा पृथिवी निष्टतक्षुः।
मनीषिणो मनसा विब्रवीमि वो ब्रह्माध्यतिष्ठद् भुवनानि धारयन्॥
(तैत्तिरीय ब्राह्मण २/८/९, तैत्तिरीय संहिता ५/६/१)

Brahma was that forest and that tree by whose cuttings this sky and earth have been formed.

By analyzing it in our mind, we have reached the conclusion that Brahma is the foundation of world built by Brahma.

ब्रह्मार्पणं ब्रह्म हविर्ब्रह्माग्नौ ब्रह्मणा हुतम्। ब्रह्मैव तेन गन्तव्यं ब्रह्मकर्म समाधिना॥ (गीता ४/२४)

Each object is Brahma-arpaṇa (act of offer), havi (matter offered), Agni (consumer), huta (consumption), karma (all acts) and end also is in Brahma.

Verse 5

O Viśvakarmā ! You are favouring your associates by (natural) education (śikṣā) of the three dhāmas –Parama (top), Avama (lower) and Madhyama (middle). These associates (sakhā) are your havi (consumables). O Svadhāvan (holder of himself)! You may continue your yajña (Sarvahuta) by expanding yourself by havi in form of svadhā.

Comments-(1) Each object and universe is viewed in 4 forms called 4 pāda (legs) of Puruṣa-

(a) Kṣara- Any structure within a boundary, called Chhanda. That is always decaying.

(b) Akṣara-Though the outer form and structure is constantly decaying its identity and function remains the same. It is called Kūṭastha, like a hill is known by name of its top. Another meaning of Kūṭastha is that it is hidden invisible identity, only the outer form is seen.

(c) Avyaya-As part of the system, any object is always constant. There are 5 conservation laws in Physics-4 in classical and 1 in quantum physics. Sum total of any entity is always constant-that is Avyaya (not spent). It may also be viewed as chain of transformations of the object. As it is higher than the previous 2, it is called Puruṣottama.

(d) Parātpara- At this level, there is no difference between any 2 objects-that is ultimate root and beyond perception-so it is called Parātpara (beyond limit)

द्वाविमौ पुरुषौ लोके क्षरश्चाक्षर एव च। क्षरः सर्वाणि भूतानि कूटस्थोऽक्षर उच्यते॥ १६॥
उत्तमः पुरुषस्त्वन्यः परमात्मेत्युदाहृतः। यो लोकत्र्यमाविश्य विभर्त्यव्यय ईश्वरः॥ १७॥

यस्मात् क्षरमतीतोऽहमक्षरादपि चोत्तमम्। अतोऽस्मि लोके वेदे च प्रथितः पुरुषोत्तमः॥१८॥ (गीता १५/१६-१८)

(2) Corresponding to these 4 aspects of puruṣa, there are 4 aspects of time. Stephen Hawkins has described only 2 aspects-Thermodynamic and measurable time which should be different in mechanics (relative to observer) and Electromagnetism (same in all frames of reference). But we take both as same. Time (Kāla) can be defined as perception of change. Change is of 4 types-(1) All natural processes are irreversible. Disorder or entropy always increases in any process (2nd law of thermodynamics). (2) Some processes are almost cyclic. Natural cycles are day, month, year. Their time period is unit of time. (3) Any system has a life time for which its functions continue. This is called Kumbha in Atharva-veda, Kāla-sūkta (19/53 and 54). It can also be viewed as general state of affairs called 'times'. (4) At smallest and largest level, we have no idea of change-that is Parātpara. Parātpara Puruṣa and Kāla-both are undefined.

Puruṣa	Kāla
Kṣara	Nitya (always decays, called mṛtyu = death)
Akṣara	Janya (creative, by yajña in natural cycles)
Avyaya	Akṣaya (life span in units of time cycles, state of a system= times)
Parātpara	Parātpara (Beyond perception).

These are described in Bhāgavata purāṇa (3/11) and definitions are in Gītā.

कालोऽस्मि लोकक्षयकृत्प्रवृद्धो (गीता ११/३२) = I am the Kāla which increases in direction of decay.

सह्यज्ञाः प्रजाः सृष्ट्वा पुरोवाच प्रजापतिः । अनेन प्रसविष्यध्वमेषवोऽस्त्विष्ट कामधुक् ॥१०॥

एवं प्रवर्तितं चक्रं नानुवर्तयतीह यः॥१६॥ (गीता, ३)

Yajña continues since creation of man. That is means to produce desired objects (goods + services). That is done in cycles.

कालः कलयतामहम् ॥(गीता, १०/३०)= I am the Kāla among calculations (difference of 2 types in mechanics and electromagnetism is still not resolved)

अहमेवाक्षयः कालो धाताऽहं विश्वतोमुखः॥ (गीता १०/३३)

= I am akṣaya kāla and holder and source of world.

(3) The 3 dhāmas in space are-(i) Svayambhū (whole universe), (ii) Parameṣṭhī (galaxy), and (iii) Saura (solar system). In each universe, there are Bhū (-mi), Bhuvar and Dyū. Dyū of one level is Bhū of next level. Thus 2 pairs are common in between and there are 7 lokas. Original abstract source is Parātpara or Ananta. The spread matter in each is water (Rasa, Ap, Ambha, Mara) and expanse is ocean.

Correspondingly, there are 4 oceans on earth. Boundaries between 7 continents are 7 oceans. Similarly, zones formed around earth by rotation of planets is also named as Dvīpa (continents) and oceans of same names. That is disc shaped earth of 100 crore yojana

diameter (1yojana = 1000 part of earth equatorial diameter). That is up to Neptune orbit and its inner half is brighter called Loka (bright) and outer is Aloka. 4 oceans on earth are called 4 spheres which give useful minerals and materials. That is by churning of those oceans, called Samdra-manthana. These are solid crust (for minerals), water ocean (minerals, salts etc), upper crust for agriculture and forestry (Kurmī caste does agriculture, Kūrma was base for manthana.) and atmosphere giving air and rains. All these are termed as spheres.

(4) Teaching-As Brahma is of 4 pādas, it is called Aja (unborn). Aja also means goat of 4 legs. Similarly, in Arabic, Bakar means God and any 4 footed animal-cow in Turkey, sheep and camel in Arab and goat in India. Like sarvahuta yajña of Prajāpati in space, each aspect of man sacrifices himself into higher aspect. Physical body (kṣara puruṣa) is under control of Akṣara, i.e body functions are controlled by intellect and personality. The person is sacrificing himself for family, family is for society and finally everything is surrendered to God. That is meaning of self-sacrifice in Bakarid. By chain of sacrifices, one yajña sustains the other-internal yajña of man keeps him fit and active, that maintains his family and finally society is run. Basic Yajña of society is agriculture which produces Anna (food) needed for life. In general, any product of any yajña can be called anna which means goods and services needed for society. Use of product of one yajña into another maintains the state as stated in last verse of Puruṣa sūkta.

अन्नाद् भवन्ति भूतानि पर्जन्यादन्न सम्भवः। यज्ञाद् भवति पर्जन्यो यज्ञः कर्मसमुद्भवः॥ (गीता ३/१४)

Some types of karma give rise to yajña (useful production), from yajña we get parjanya (creative set up, it means rains in context of farming), and parjanya gives anna.

यज्ञेन यज्ञमयजन्त देवास्तानि धर्माणि प्रथमान्यासन्।

ते ह नाकः महिमानः सचन्तः यत्र पूर्वे साध्याः सन्ति देवाः॥ (पुरुष सूक्त, यजुर्वेद ३१/१६)

Primary dharma (acts to sustain society) of Devāh (society producing its needs, instead of looting others) was to run one yajña by other and by maintaining this chain of yajñas, Sādhyas reached the top before era of Devas.

Verse 6

O Viśvakarmā ! you are sustaining earth and sky by yajña from your mahimā (expansion) by offerings (svadhā) of (Parameṣṭhī, saura etc, successive images of Svayambhū within previous spheres). Ignorants maintain self only which destroys them. So we pray Indra as intellect within our minds to guide us for mutual rise.

Comments-(1) The chain of creation is given below-

स ऐक्षत प्रजापतिः (स्वयम्भूः)-इमं वा आत्मनः प्रतिमामसृक्षि। आत्मनो ह्येतं प्रतिमामसृजत। ता वा एताः प्रजापतेरधिदेवता असृजन्त-(१) अग्निः (तद् गर्भितो भूपिण्डश्च), (२) इन्द्रः (तद् गर्भितः सूर्यश्च), (३) सोमः (तद् गर्भितश्चन्द्रश्च), परमेष्ठी प्राजापत्यः (स्वायम्भुवः)। (शतपथ ब्राह्मण ११/६/१/१२-१३)

(2) Person consuming only for himself, does Agha (lack of 4 puruṣārtha = aims of life-dharma, artha, kāma, mokṣa)- केवलाघो भवति केवलादी। (ऋग्वेद १०/११७/६)

Verse 7

We offer Vāchaspati form of Viśvakarmā who is manojuva in its Avyaya aspect. For maintaining world and people, sādhu-karmā (sukṛta-coordinated acts) Viśva-Śambhū may make this yajña aim of our lives.

Comments-(1) Manojuva = manojavah is explained in Ṛgveda (10/71/7-8). Manojavitva is a siddhi in Yogasūtra (3/48). There are 4 levels of Antah-karaṇa (inner instruments)-Mana (random fluctuations in brain), Buddhi (organized thinking, capable of expression in sentence), Ahankāra (individuality, unity of different organs), and Chitta (personality, self). All external organs act only when they are joined with Mana. Mana is random, it is directed to fruitful act by Buddhi. Ahankāra directs buddhi for better of self. Chitta uses that for self satisfaction. Finally all are merged into ātmā, and ātmā to Paramātmā.

(2) Sādhu-karmā is same as sukṛta, used for act of Brahma in Taittirīya upaniṣad (2/7) give earlier. Here Doer and work are merged. Unless there is complete coordination between doer, act, and users-work will not be done or it may not give good result.

(3) Śambhū-Brahma is seen in 3 aspects-Kham is Brahma or its first creation Ākāśa (vacant space). Kam is creative aspect which is Prāṇa in motion. Ram is Prāṇa pervading all creation. By their suitable combination, there is Śam = peace and order in world. Creation of that Śam state is called Śambhū (Śankara).

ॐ खं ब्रह्म खं पुराणं वायु रं खमिति ह स्माह.. (बृहदारण्यक उपनिषद् ५/१/१), खं मनो बुद्धिरेव च (गीता ७/४)

को नाम प्रजापतिरभवत् को वै नाम प्रजापतिः॥ (ऐतरेय ब्राह्मण ३/२१)

को वै प्रजापतिः। (गोपथ ब्राह्मण, उत्तर ६/३), कस्मै देवाय हविषा विधेम। (वा, यजु. १२/१०२)

कस्मै द्व वषडस्तु तुभ्यम्। (वा, यजु. ११/३९)

प्रजापतिर्वै कः। (ऐतरेय ब्राह्मण २/२८, ६/२१; कौषीतकि ब्राह्मण ५/४, २४/४, ५/९; ताण्ड्य महाब्राह्मण ७/८/३; शतपथ ब्राह्मण ६/४/३/४, ७/३/१/२०; तैत्तिरीय ब्राह्मण २/२/५/५, जैमिनीय उपनिषद् ब्राह्मण ३/२/१०, गोपथ ब्राह्मण, उत्तर १/२२)

प्राणो वै रं प्राणे हीमानि सर्वाणि भूतानि रतानि। (शतपथ ब्राह्मण १४/८/१३/३, बृहदारण्यक उपनिषद् ५/१/२१)

रकारो वह्नि वचनः प्रकाशः पर्यवस्यति। (रामरहस्योपनिषद् ५/४)

र इति रञ्जयतीमानि भूतानि। (मैत्रायणी उपनिषद् ६/७)

शं नो मित्रः शं वरुणः शं नो भवत्यर्यमा। शं नो इन्द्रो बृहस्पतिः शं नो विष्णुरुक्रमः॥

(ऋक् १/९०/९, अथर्व १९/९/६, वा. यजु. ३६/९, तैत्तिरीय आरण्यक ७/१/१)

Verse 8

With eyes (knowing other parts of world) and with steady Mana (Manojuva stated earlier) Pitā (conscious cause of creation) created Ghr̥ta (butter, fluid present in all bodies) in which

matters moved (mixed). By that, earlier made earth-sky had firm shape and they grew further.

Comments-(1) Only by proper observation of present state and Manojava (link of Mana-buddhi-ahankāra-chitta) proper work can be done.

(2) Ghṛta means clarified butter which pervades each part of milk or curd. Similarly, primordial fluid prevalent in space is called Ghṛta here. This is place of churning in Antarikṣa (intermediate between earth and sky).

दधि हैवास्य लोकस्य रूपम्, घृतमन्तरिक्षस्य, मध्वमुष्य, तृतीयस्यां वै इतो दिवि सोम आसीत्। (शतपथ ब्राह्मण ७/५/१/३)

(3) By churning or mixing in primordial water (Ap, Ghṛta), further creation is done. That moving force has been called Mātariśvā (air, which acts as mother in Antarikṣa. अनेजदेकं मनसो जवीयो नैनद्देवा आप्नुवन् पूर्वमर्षन्। तद्भावतोऽन्यानत्येति तिष्ठत्स्मिन्नपो मातरिश्वा दधाति॥ (ईशावास्योपनिषद्, यजुर्वेद ४०/४)

Verse 9

Viśvakarmā is Vimanā (with all alternate forms of mana), Vihāya (all containing, sky), Dhātā (holder, sustainer), Vidhātā (creator) and ultimate seer of all. That is even beyond 7 Ṛṣis stated by knowers. By offering to that that unique creator, we can get all our desired objects.

Comments-(1) Result of actions is uncertain due to effects of surroundings. So, there was debate between Śankarāchārya and Maṇḍana Miśra whether act itself gives result or it is given by God.

फलप्रदं कर्म फलप्रदोऽजः, कीरांगना यत्र गिरो गिरन्ति।

द्वारस्थ नीडान्तर सन्निरुद्धा, जानीहि तन्मण्डनपण्डितौकः॥ (माधवीय शंकर दिग्विजय)

Gītā also tells that we should not be worried about result, firstly the work will suffer and secondly, it is always uncertain. This uncertainty is explained in Kitava sūkta of Ṛgveda (10/34) which is about gambling. Results of actions are already uncertain, we should not compound it by further gambling. Rather, we should judiciously use our resources or farming (and other products). That gambling with God only is useful.

अक्षैर्मा दीव्यः कृषिमित् कृषस्व वित्ते रमस्व बहुमन्यमानः।

तत्र गावः कितव ! तत्र जाया तन्मे वि चष्टे सवितायमर्य्यः॥ (ऋक् १०/३४/१३)

(2) As Avyaya puruṣa, Prajāpati is akṣaya kāla, creator and upholder of world.

अहमेवाक्षयः कालो धाताऽहं विश्वतोमुखः॥ (गीता १०/३३)

(3) Mind is always fluctuating. But Vimanā here means that Viśvakarmā is capable of creation in many alternate ways also. Gītā also tells that, we should consider all alternates, while acting we should select one alternative only. In fact, followers of single vāda (theory) of Veda have been called Nāstika (non-believer) as they tell Na+anyat+asi = there is nothing else except my view. व्यवसायात्मिका बुद्धिरेकेह कुरुनन्दन। बहुशाखा ह्यनन्ताश्च बुद्धयोऽव्यवसायिनाम्॥४२॥

यामिमां पुष्पितां वाचं प्रवदन्त्यविपश्चितः। वेदवादरता पार्थ नान्यदस्तीति वादिनः॥४३॥ (गीता २/४२-४३)

(4) It has been stated earlier that creation has started from primordial strings of 10^{-35} meter size, called Ṛṣi. They are infinite but indistinguishable. Creation started with creation of source (sūrya) and sink (yama). That was single Ṛṣi, called Pūṣā. It split into 3 parts-Bhṛgu (attraction), Angirā (radiation) and Atri (mixing of 2 effects). Original Pūṣā also is called Atri (= not split into 3). Then they further divided into 3 parts and with original unpaired Atri, they became 7 Ṛṣis. Thus, Prajāpati as Ekarṣi Pūṣā is higher than 7 Ṛṣis.

साकञ्जानां सप्तथमाहुरेकजं षड्विंशमा ऋषयो देवजाः।

तेषामिष्टानि विहितानि धामशः स्थात्रे रेजन्ते विकृतानि रूपशः॥ (ऋग्वेद १/१६४/१५)

अर्वाग्बिलश्चमस ऊर्ध्वबुधस्तस्मिन् यशो निहितं विश्वरूपम्।

तस्यासत ऋषयः सप्त तीरे वागष्टमी ब्रह्मणा संविदाना॥ (शतपथ ब्राह्मण १४/५/२४)

Verse 10

Our questions are about Viśvakarmā Prajāpati who is our Pitā (conscious cause of creation), Janitā (base and matter for creation), Vidhātā (holder and sustainer) and knower of all acts, and who is only foundation of all Devas.

Comments-Unique creator, sustainer and foundation is stated in various ways-

योऽस्याध्यक्षः परमे व्योमन्। (ऋग्वेद १०/१२९/७)

यः सर्वज्ञः सर्ववित् यस्य ज्ञानमयं तपः। तस्मादेतद् ब्रह्म नाम रूपमन्नञ्च जायते॥ (मुण्डकोपनिषद् १/९)

Verse 11

The original Ṛṣis worship this Viśvakarmā by offer of draviṇa (money flowing like liquid, Ap in sky) like common persons doing prayer. Those Ṛṣis had created moving and non-moving objects by mixing these draviṇa.

Comment- Ṛṣis are first creations of Viśvakarmā, which created other objects from Ap which was spread everywhere and which held everything in its womb. These Ṛṣis are primordial forces depicted like a bird-Suparṇa. There are 4 fundamental forces of natures-shown as sides of rectangle. Original source is head. There are 2 wings depicting parity in quantum theory.

Verse 12

He is beyond Dyu (sky) and Pṛthivī (earth). He is beyond Deva and Asura. His Ap (original water) was the womb which held everything where all Devas see each other.

Comments-(1) 33 Devas are prāṇa of 33 zones of solar system. These are creative due to radiation of sun. Beyond that, the prāṇa of galactic field is Asura, which is non-creative. Devas in each direction are called Viśvedeva-10 in number. Devas beyond galaxy are Virāja devas as stated in Viṣṇu purāṇa etc.

(2) There are 3 zones within earth and 30 dhāmas outside in solar system. Each is double of the previous, starting from earth. Thus, solar system = 230 x earth size. Till that region light of sun is more (than the background)

त्रिंशद्द्वाम वि-राजति वाक् पतङ्गाय धीमहि । प्रति वस्तोरहद्भ्युभिः ॥ (ऋक्, १०/१८९/३)

Here measuring rod is earth itself as in Sūrya-siddhānta-

मा छन्दः तत् पृथिवी, अग्निर्देवता .. (मैत्रायणी संहिता, २/१४/९३, काठक संहिता, ३९/३९) Measure of loka has started in Taittirīya upaniṣad (2/8) from Earth-called Manuṣya-loka.

Bṛhadāraṇyaka upaniṣad (3/3/2)-

...द्वात्रिंशतं वै देवरथाहन्यन्ययं लोकस्तं समन्तं पृथिवी द्विस्तावत्पर्येति तां समन्तं पृथिवीं द्विस्तावत्समुद्रः पर्येति..... (बृहदारण्यक उपनिषद् ३/३/२)

= 32 ahar (Plural is ahāni) is measure of Deva-ratha, its double in all directions is Pṛthivī (enclosure of solar system), that is surrounded all around by Samudra (ocean) of twice size.

Thus all measure starts from earth as measuring rod. But there are 3 Dhāmas within earth, so

Dhāma 3 = earth. Distance from center of measure is equal to radius of earth.

Radius of Dhāma 4 = 2 x earth radius,

Radius of Dhāma 5 = 4 x earth radius, and so on.

Radius of solar system is distance travelled by light in 1 year. That was the region whose material started creation of sun, so it is Āditya. Thus is called samvatsara (year)-

संवत्सरः स्वर्गा (=सौरक्षेत्र) -कारः (तैत्तिरीय ब्राह्मण २/१/५/२)

वाक् (=सौरक्षेत्र) संवत्सरः (ताण्ड्य महा ब्राह्मण १०/१२/७)

Within this region, devas are created-प्रजापतिः संवत्सरः (शतपथ ब्राह्मण १/६/३/३५, १०/२/६/१, ऐतरेय ब्राह्मण १/१, १/३, २/८, २/१७, ४/२५ आदि) संवत्सरो वै देवानां जन्म (शतपथ ब्राह्मण ८/७/३/२१)

After samvatsara is Varuṇa region- संवत्सरो वरुणः (शतपथ ब्राह्मण ४/४/५/१८ आदि)

(2) Devas are divided into 3 groups starting from center of earth- 8 vasus, 11 rudras, 12 ādityas. At junctions, there are 2 Aśvinas making them 33.

(3) On earth also, people who were producing own needs were devas. Asuras used their strength (asu) for usurping production of others.

Verse 13

The ocean of Parameṣṭhī, the Āpah (with Bhṛgu = attraction) and Angirā = radiation) first held the Hiraṇyagarbha (centre of radiation) in its womb giving birth to solar system in which all the (creative) devas exist. Sun is nābhi (navel, center) of Aja (unborn, Avyaya puruṣa) as sun is creator and sustainer of all life and worlds.

Comments-Original creator has been called Aja which is Avyaya puruṣa. Parātpara is not creative.

अजोऽपि सन्नव्ययात्मा भूतानामीश्वरोऽपि सन्। प्रकृतिं स्वामधिष्ठाय सम्भवाम्यात्ममायया॥ (गीता ४/६)

अजस्य रूपे किमपि स्विदेकम्। (ऋग्वेद १/१६४/६)

Verse 14

We do not know truly the Viśvakarmā who has created all Bhuvanas. Some other concepts prevail in minds of thinkers which cannot be called final or decisive. Persons enveloped in ignorance (nīhāra =fog, faint) are moving and talking loosely about original source just to feed themselves.

Comments-(1) Same has been described in Kathopaniṣad (1/2/5)-

अविद्यायामन्तरे वर्तमानाः स्वयं धीराः पण्डितम्मन्यमानाः।

दन्द्रम्यमाणाः परियन्ति मूढा अन्धेनैव नीयमाना यथान्धः॥ (कठोपनिषद् १/२/५)

Persons living in ignorance consider themselves as dhīra (steady knowledge) and paṇḍita (scholar). They beat their own drum (about their knowledge) and such fools move in circles (quote each other). These blind lead other blind persons.

Similar verse is in Muṇḍakopaniṣad (1/2/8) with slight change in line 2- जञ्घन्यमानाः in place of दन्द्रम्यमाणाः. The fools kill the knowledge-veda also fears that persons ignorant of Itihāsa-purāṇa will kill them. इतिहास पुराणाभ्यां वेदं समुपवृंहयेत्। बिभेत्यल्पश्रुताद् वेदो मामयं प्रहरिष्यति॥ (महाभारत १/१/२६७)

(2) Nāsadīya sūkta also states un-knowability of universe; gives 10 alternate theories of creation-

नासदासीन्नो सदासीत्तदानीं नासीद्रजो नो व्योमा परो यत्।

किमावरीवः कुह कस्य शर्मन्नम्भः किमासीद् गहनं गभीरम्॥ १ ॥

न मृत्युरासीदमृतं न तर्हि न रात्र्या अह्न आसीत् प्रकेतः।

आनीदवातं स्वधया तदेकं तस्माद्भान्यन्न परः किञ्चनास॥ २ ॥

तम आसीत् तमसा गूळहमग्रेऽप्रकेतं सलिलं सर्व मा इदम्।

तुच्छेनाभ्वपिहितं यदासीत्तपसस्तन्महिना जायतैकम्॥ ३ ॥ (ऋक् १०/१२९/१-३)

Perception of Brahma

Brahma is beyond comprehension, but for our understanding, we see it in 3 ways-

(1) Śambhū (Śam = Kam + Kham + Ram) as seen above)

(2) Aum-tat-sat-ॐ तत्सदिति निर्देशो ब्रह्मणस्त्रिविधः स्मृतः। (गीता १७/२३)

(3) Jñāna-Bala-Kriyā-न तस्य कार्यं करणं न विद्यते, न तत्समश्चाभ्यधिकश्च दृश्यते।

परास्य शक्तिर्विविधैव श्रूयते, स्वाभाविकी ज्ञानबल क्रिया च॥ (श्वेताश्वतर उपनिषद् ६/८)

The triple aspect is indicated in Gāyatrī mantra also-

ॐ भूर्भुवः स्वः-तत् सवितुर्वरेण्यं, भर्गोदेवस्य धीमहि, धियो यो नः प्रचोदयात्।

It starts with Aum, then 3 vyāhṛti (collection of matter as lokas), or name of 7 lokas. Then 3 pāda of mantra follows. Original source is at top but beyond perception. We see due to its effect as radiance, motion etc. That inspires us. These are cosmic (ādhidaivika), physical (ādhibhautika) and inner (ādhyātmika) meanings. These 3 pādas indicate-Brahmā (creative aspect of Brahma), Viṣṇu (seen by radiance of sun), Śiva (perception, Guru).

Only as Brahmā, its 3 parts are-source matter, visible lokas, and veda classification. Root veda Atharva is branched into 3 more-R̥k, Yaju, Sāma-symbolized by branch of Palāśa tree with 3 leaves. Thus trayī (triple) means 4 vedas = 1 root + 3 branches.

As Viṣṇu, part 1 is-observation and desire for creation (Īkṣate, Akāmayat), part 2 is actual maintenance of world with Sun having central role, and part 3 is consciousness present at each point acting freely. Independent existence at each point is indicated by Aśvattha (Pippala) tree whose leaves hang loosely and shake independent of the other.

As Śiva, part 1 is original Mana called śovasīyasa (existing in vacuum), part 2 is perception of sun radiation which is intense (Rudra) within earth orbit and gradually calms down outwards as Śiva, Śivatara, Śivatama. Beyond solar system, it is Sadāśiva existing with Ambhas (Ap with fluctuations) of galaxy, so it is called Sāmba- Sadāśiva. Part 3 is start of Guru tradition with Śiva, called Ādinātha. Guru makes disciple a person like himself by imparting knowledge. That is symbolized by Vaṭa (Ficus) tree whose aerial roots on touching ground become a tree like the original. Secondary trees like disciples are Druma (tree) from Druma, so it is called Dumadumā. Each place of Śiva has a Dumadumā-Haramandir of Amritsar, Bhubaneswar, Vaidyanāth, Dakshineswar at Kolkata, Kamakhya, Somnath etc.

Hanumān is effect of each aspect of Śiva, so he is incarnation. Creation always follows methods of earlier creation, so creator is called Vṛṣā-kapi. Vṛṣā is source of Varṣā (rains), i.e. drops (called drapsah) of galaxies, stars are formed from original source. It is like previous creation, so it is called an animal with habit of emulation (Kapi = copy). Energy gradient in space called as Rudra, Śiva, Śivatara, Śivatama create motion which can be seen. This aspect is called Māruti (motion like marut = air). Teaching is Śiva, its effect is Manojava-a name of Hanumān. Center of 2 Hanus (lips) is junction of organs of action and knowledge, so Hanumān means effective joining of action and thought (Taittirīya upaniṣad 1/3/5). That is method of manojava state. Central tree of Vaṭa is Śiva, secondary trees (Dumdumā) are Hanumān.

Gaṇeśa is visible (pratyakṣa) Brahma which can be counted as separate objects. It is called Kharva (powder form), which also means number 10^{11} which is number of galaxies in visible universe equal to number of stars in galaxy or number of neurons in human brain. These structures are Gaṇapati, Mahā-Gaṇapati indicated in part 2 of Gāyatrī. Creation is from only one of the 4 parts of Puruṣa (Puruṣa-sūkta, 3), remaining 3 parts unused are called Ucchhiṣṭa (left over) Gaṇapati. Part 3 is knowledge expressed in words, sentences, symbols which are countable.

Opposite to countable knowledge is abstract knowledge, called Rasa (ānanda-effect of original Rasa) or Bhāva. That is Sarasvatī (Sa + rasa+vatī). Physically, it is seen as expanse

of galactic matter called Sarasvān ocean. Its image is cerebral fluid in brain. Original abstract knowledge and feelings in mind are parts 1 and 3 of Gāyatrī.

In between is Kārttikeya. Discrete objects are Brahma (Gaṇeśa), perceiving a pattern is Subrahma-parts joined by sveda (sweating). Human Kārttikeya had made a shorthand script Tamil for international use in war. This merged first 4 letters in each group of sparśa letters, so it is Subrahmanya.

Conscious cause is Deva or Vṛṣā (which rains or radiates). Field or matter which receives is Yoṣā. In Veda, the 3 forms of Devī are called Bhāratī, Ilā, Sarasvatī, further divided into 3 each. Mārkaṇḍeya purāṇa (Durgā-saptaśatī) calls them as Kālī, Lakṣmī, Sarasvatī with mahā prefix. These indicate 3 parts of Gāyatrī.

Image actions

Viśvakarmā-sūkta (5) tells that creation in space is śikṣā (teaching) for us. Thus, all creation in space emulates the actions in space. Some examples are-

(1) Like 5 stage creation in space, yajña is divided into 5x5 classes (Taittirīya upaniṣad 1/7/1) Aitareya Brāhmaṇa (1/5) indicates 5x5 classification of yajña as per-1. Available materials, 2. Process of consumption, 3. Completion of desires, 4. Consumption of products, 5. Times of using men and materials. In any creation, these are taken into consideration.

(2) Abstract is transformed in expressed forms in 9 stages (sarga). Bhāgavata purāṇa counts 10 sargas including abstract source. Creation cycle of each sarga is measure of time unit-giving 9 units of time in Sūrya-siddhānta (14/1). Parallel to that, mandira or Vimānas are made 9 storied.

(3) Viśva has 3x7 classification, so Meru as Garuḍa pillar has 22 rings including 1 un-divided source. Some temples like Tirupati make it 16+6, parallel to 16 verses of Puruṣa-sūkta followed by 6 of Uttara-Nārāyaṇa-sūkta in Yajurveda, chapter 31. For 7 lokas, Devī mandiras have 7 rings. Meru has been called Ulba (umbilical cord) of creation in Kūrma (1/4/36-40), Brahmanḍa (1/1/3/26-29). This is Hiranyagarbha of Ṛgveda (10/121) or Atharva (4/2). Atharva (10/7,8) calls it skambha (pillar link) or Sarvādhāra (base of all). Parallel to 14 Buvanas, Jaina Meru pillar has 14 levels of circles. From abstract, there is expansion of forms, again they merge into one. This is symbolized by ratha wider in middle as famous ratha of Kumbakonam. That is Jaina symbol of creation of world.

(4) Temple shape is like permanent features of nature-mountain (conical, pyramid), tree trunk (paraboloid) which are stable.

(5) Town planning has overall design for drainage of water. Viṣṇu made is spherical like actual shape of earth with top point at centre, with concentric circles outwards. That was called Uru (big design) like Urvī (earth). So, Viṣṇu has been called Urukrama, and major towns in south are called Uru. Old Delhi had circular design.-

शं नो विष्णुरुक्रमः (ऋग् वेद १/९०/१)

Śrī-yantra is also a model of creation-having design in 9 circles. Śrī-nagar of Kashmir and Garhwal had this design. Vidyāraṇya wanted this design for Śrī-vidyā-nagar, but there was some deviation and he felt sorry that it would not last long. Then it was called Vijayanagar destroyed in 1565 AD.

Indra has been called Purandara (destroyer of Pura = structures). His towns were called Pura, with rectangular matrix.

Meru is rotation axis of earth. Map of north hemisphere (similarly for south) is made into 4 sheets of 90 degree longitude width each. That is pyramidal projection and each sheet has 4 colours. Parallel to that, there is Meru design, from central top point, drainage is along 3 triangles formed by diagonals of a square.

Vajra is used for towns on both sides of a river, 2 triangles on both sides draining into river. Old Vajranagar (Harivamśa purāṇa) is now called Basra of Iraq.